

R E M A R K S

The Office Action of January 25, 2007, has been received and carefully reviewed. Claims 1-16 have been amended to insert the term "non-aqueous" before "composition" in order to further refine what the Applicants consider to be their invention. In addition, Applicants made a minor grammatical correction to claims 1-3 by replacing the term "compounds" with the term "contains". No new matter has been added by these amendments.

Rejection Under 35 U.S.C. §102(b) or 103(a)

The Examiner rejected claims 1-6, and 10-12 under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a), as being obvious over Takegawa et al. (USP 4,386,992). In particular, the Examiner states that Takegawa et al. disclose a two-part adhesive composition comprising an aqueous emulsion and a gelling agent where the emulsion includes a polymer in water and a plasticizer such as phthalic acid. According to the Examiner, the emulsion adhesives of Takegawa et al. containing polyacrylate and acrylate copolymers read on

thermoplastic resins of claims 1 and 4. The Examiner however, admits that the prior art is silent with respect to whether the claimed composition gelation within 30 seconds to 60 minutes occurs after mixing the aqueous emulsion adhesive comprising the plasticizer with the gelling agent.

The Examiner states that because the prior art teaches essentially the same composition, one of ordinary skill in the art would have a reasonable basis to believe that the claimed two part composition having the same components would exhibit the same physical properties absent a showing of unexpected results. The Applicants respectfully traverse this rejection.

Takegawa et al. teach that aqueous emulsion adhesives generally had problems with low initial bond strength. The aqueous adhesives were preferably used as fillers because they have low viscosity and can be diluted with water. The major drawback for aqueous adhesives was the fact that due to their poor initial adhesive strength, use of other means to hold the bonded elements together, such as tacking or pressing or otherwise maintaining the elements in contact, was necessary for good final adhesion.

Takegawa et al. disclose an improvement to these aqueous synthetic resin emulsion adhesives of the prior art by addition of a gelling agent, which improved the viscosity of the two-part adhesive composition. See for example, Takegawa et al. at col. 1 lines 22-66. Furthermore, the compositions taught in Takegawa et al. contain between 90-95% by weight of water (col. 4, lines 45-50; col. 5, lines 1-9).

In contrast, the two-pack curable adhesives disclosed and claimed in Applicants' invention do not contain any water, and would not be considered by those of ordinary skill in the art, to be aqueous adhesives. The difference is significant for the following reasons. First, aqueous adhesives, even when gelled, do not have resistance to showering the parts before they are subject to electrodeposition. This includes the adhesive being exposed to jets of 50°C water at about 3 kg/cm² of pressure (specification at page 21, lines 7-17). Second, aqueous adhesives, such as taught in Takegawa et al., due to their aqueous content, cause corrosion or rust on the inside of the welded or adhered parts, which is not desirable in the automobile industry. Third, because of the high

temperatures involved in the baking step of the coating and painting of the parts, steam can be generated by the enclosed aqueous adhesives, causing damage to the parts.

It is because of these significant differences in chemical composition and physical characteristics between the aqueous resin adhesives of Takegawa et al. and the non-aqueous curable resins of the present invention, that one of ordinary skill in the art would not have looked to Takegawa et al. to teach a method of improving non-aqueous heat curable sealer compositions, and would not have any reasonable expectation that a combination of teachings of Takegawa et al. would result in a successful non-aqueous two-pack curable resin adhesive, as claimed by Applicants. As such, Applicants respectfully request withdrawal of this rejection.

The Examiner additionally rejected claims 7-9 and 13-16 under 35 U.S.C. §103(a) as being unpatentable over Takegawa et al., in view of USP 5,166,229 to Nakano et al. According to the Examiner, Takegawa et al. do not teach thermosetting epoxy resins, latent curing and high viscosity, or the utilization of the Applicants' composition in the spot/body welding step of an automobile

assembly line. According to the Examiner, Nakano teaches generally, that epoxy resins are widely used as an adhesive or paint composition in the automotive art, because of their adhesion to various materials. The Examiner also states that Nakano teaches that epoxy resin compounds have excellent shower resistance and can be used in spot welding on an assembly line. Therefore, according to the Examiner, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to add thermosetting epoxy resins and latent curing agents to the adhesive composition of Applicants, and would have been motivated to do so. Applicants respectfully traverse this rejection.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Applicant submits that the Examiner has failed to establish a *prima facie* case of obviousness with regard to claims 7-9 and 13-16 because the combination of Takegawa et al. in view of Nakano et al. does not teach each and every element of the claimed invention. Specifically, the

combination does not teach the non-aqueous heat curable sealer compositions as claimed in Applicants' invention. As such, Applicants' respectfully request withdrawal of this rejection.

With this amendment and the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any questions or comments, the Examiner is cordially invited to telephone the undersigned attorney.

Respectfully submitted,
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